

Regionwide Example Water Quality Improvement Projects As Provided by Local Stakeholders  
(Under project number, R – 1.1 = Regionwide, General Priority Project #1 from Table 1, First example)

<b>Project Number</b>	<b>Project Description</b>	<b>Geographic Areas and/or Example Watersheds</b>	<b>Management Measure</b>	<b>Watershed Restoration Action Strategy</b>
<b>REGIONWIDE PROJECTS</b>				
<b>R-1.1</b>	Fund Drainage Basin Coordinator to facilitate development and implementation of watershed management plans	Lake County; Fresno River; Coarsgold Creek; Bear Creek; Anderson Creek; etc.	All management measures	
<b>R-1.2</b>	Implement Watershed management plans	Stanislaus River; Upper Putah Creek; Battle Creek; Bear River	All management measures	Upper Putah Creek Watershed Management Plan; Battle Creek Restoration Plan; etc.
<b>R-1.3</b>	Develop Countywide water resources protection plan that establishes minimum requirements for all projects having the potential to impact water quality	Lake County	Agriculture; Urban; Mining; Forestry; Hydromodification	
<b>R-2.1</b>	Implementation of BMPs (such as optimizing irrigation systems) to mitigate/reduce nonpoint source pollution from irrigated agriculture	Sacramento River; San Joaquin River; Delta and tributaries including Lower Mokelumne and Lower Cosumnes Watershed	Agriculture 1A; 1C; 1D; 1G Hydromodification 5.3A Urban 3.6A (Public Outreach) Wetlands and Riparian Areas	Upper Sacramento River Fisheries and Riparian Habitat Management Plan and Sacramento River

<b>Project Number</b>	<b>Project Description</b>	<b>Geographic Areas and/or Example Watersheds</b>	<b>Management Measure</b>	<b>Watershed Restoration Action Strategy</b>
	(including salt, pesticides, nutrients, sediment, BOD); include water quality, toxicity and biological monitoring to assess effectiveness of practices		6A, 6B	Conservation Area Handbook (Sac River and tribs.); Plan for California's Nonpoint Source Pollution Control Program; Cosumnes River Project Plan
<b>R-2.3</b>	Implementation of BMPs to reduce organic carbon, suspended sediment (and associated pesticides), pathogens, salt, nitrates, boron, selenium, sediment, and temperature impacts with follow-up water quality monitoring to evaluate the relative effectiveness of these various measures.	Regionwide including Barker Slough; Stanislaus; Tuolumne and Merced Rivers; and Urban Areas: Sacramento; Stockton; and other cities.	Agriculture Wetlands 6A-D; Hydromodification 5.2 B-C; 5.4; Urban 3.1; 3.3; 3.6	
<b>R-3.1</b>	Transport of pesticides from orchards to surface water bodies: Identification and measurement of influencing parameters, mass balance studies, and implementation and evaluation of the effect	Orchard production areas in the Sacramento and San Joaquin watersheds	Agriculture: 1D; 1G	

<b>Project Number</b>	<b>Project Description</b>	<b>Geographic Areas and/or Example Watersheds</b>	<b>Management Measure</b>	<b>Watershed Restoration Action Strategy</b>
	of Best Management Practices for various crops and seasons			
<b>R-3.2</b>	Promotion of orchard grower adoption of state-of-the-art pesticide sprayer technology through a program of field day demonstrations and providing loan units to growers; also to include providing growers the use of Pessl instruments to identify defects in their existing spray equipment (nozzle spray patterns, calibration) and to optimize their equipment to match sprayer discharge pattern to canopy of their individual orchards.	Sacramento River; San Joaquin River; Delta	Agriculture 1D	
<b>R-4.1</b>	Reduction in pesticide inputs, nutrient inputs, and erosion and sediment control in winegrape vineyards by implementing BMPs via a grower self-assessment program. Develop baseline	Lower Mokelumne Watershed; Lower Cosumnes Watershed	Agriculture 1A; 1C; 1D; 1G	

<b>Project Number</b>	<b>Project Description</b>	<b>Geographic Areas and/or Example Watersheds</b>	<b>Management Measure</b>	<b>Watershed Restoration Action Strategy</b>
	water monitoring data for future measurement of BMP impacts on NPS pollution reduction in vineyards.			
<b>R-5.1</b>	Demonstration projects and BMPs to reduce nutrients and BOD from dairies	Regionwide	Agriculture	
<b>R-5.2</b>	Provide resources to NRCS to provide technical assistance on Dairy BMP implementation	Regionwide	Agriculture	
<b>R-7.1</b>	Provide assistance to address and assess nutrient loads and to implement nutrient reduction plans	Fresno River; Clear Lake	1B; 1E; 1G; 3.4; 3.6	Fresno River Nutrient Reduction Plan
<b>R-8.1</b>	Implement cooperative ranching practices to protect and restore vernal pool and riparian habitat	Regionwide including Battle Creek; Mill Creek; Deer Creek; Bear Creek; and Cosumnes River Watersheds		
<b>R-8.2</b>	Establish pilot project to develop, implement and monitoring individual ranch management plans consistent with procedures set forth in the California Rangeland Water Quality Management	Regionwide including Shasta; Tehama and Butte Counties (e.g. Battle Creek; Deer Creek; and Mill Creek Watersheds)	Agriculture	

<b>Project Number</b>	<b>Project Description</b>	<b>Geographic Areas and/or Example Watersheds</b>	<b>Management Measure</b>	<b>Watershed Restoration Action Strategy</b>
	Plan.			
<b>R-9.1</b>	Implement K-12 Watershed education program	Regionwide	Education and outreach	WMI Chapter; California's Nonpoint Source Pollution Control Program
<b>R-10.1</b>	Implement BMPs to reduce erosion and sediment discharge (eg. Sediment transport)	Regionwide including Bass Lake; Miami Creek; Westside tributaries of Sacramento River; Cache Creek Watershed; Fall River; Pit River; Bear Creek Watersheds; Lake County	Agriculture; Forestry; Hydromodification; 2A; 3C; 3G; 5.3; 6B; Mining	WMI Chapter
<b>R-10.2</b>	Settling Basin Clean-up; feasibility study, pilot implementation program, and demonstration	Yolo Basin and Cache Creek	Hydromodification 5.1; Wetlands 6A-D; Agriculture 1A	
<b>R-10.3</b>	Inventory stream resource conditions and major sediment sources in order to implement stream restoration projects (PROP 13 or 319h)	North and Middle Fork of the American River watershed; Lake County; Cow Creek; Cottonwood Creek	5.1; 5.3; 6B; 6D	
<b>R-11.1</b>	Transport of pesticides applied in urban areas to surface water bodies: Identification and	Central Valley Municipalities	Urban Areas: 3.1A; 3.3A; 3.6A	

<b>Project Number</b>	<b>Project Description</b>	<b>Geographic Areas and/or Example Watersheds</b>	<b>Management Measure</b>	<b>Watershed Restoration Action Strategy</b>
	measurement of influencing parameters, implementation, and evaluation of the effect of Best Management Practices			
<b>R-11.2</b>	Urban Creeks Pesticide Management Program – implement pesticide management program	Sacramento River; San Joaquin River; Delta; and tributaries	3.1A; 3.1B; 3.1C; 3.3A; 3.6A; Outreach and Education	
<b>R-12.1</b>	Feasibility studies and pilot implementation projects of mercury control in different settings (i.e. mercury, mine, gold mine, stream bed sediment) and effectiveness monitoring	Regionwide including Cache Creek; Lower Clear Creek; Sacramento River; Delta and Tributaries; Merced River to assess impact to watershed and Delta	Resource Extraction; Mining; Hydromodification 5.1 A-B; Wetlands 6A-B; Agriculture 1A; Forestry 2C-E; 2H; 2K; Urban 3.1; 3.2; 3.3; 3.6	
<b>R-12.2</b>	Mine Stabilization and reclamation; repair sources of pollution such as mercury and sediment.	Regionwide including South Yuba Watershed (e.g. Humbug Mine) Calaveras River	5.1; 5.3	
<b>R-15.1</b>	Implement riparian and floodplain protection as well as wetland and riparian restoration projects to reduce sedimentation and enhance beneficial uses	Regionwide including San Joaquin River Basin, Clear Lake Basin; Sierra Valley; Kopta Slough Preserve; Merced River Watershed; Tuolumne River Watershed;	Agriculture; Forestry; Hydro modification 1A; 1B; 1C; 1E; 1F; 6A; 6B	

<b>Project Number</b>	<b>Project Description</b>	<b>Geographic Areas and/or Example Watersheds</b>	<b>Management Measure</b>	<b>Watershed Restoration Action Strategy</b>
		North Fork Feather River; American River and tributaries; Pit River; San Joaquin River and tributaries; Upper Cache Creek Watershed; Battle Creek, Butte Creek, Cow Creek, Cottonwood Creek, Verde Cruz Creek;		
<b>R-15.2</b>	Revegetation of banks of waterways and irrigation canals to reduce sedimentation and buffer other NPS pollution, including use of native flora.	Regionwide including Cosumnes River Watershed; Upper Sacramento River Watershed and tributaries; and Lower Mokelumne Watershed; Upper Cache Creek Watershed; Clear Lake Basin	Agriculture 1A; 1C; 1D; 1G Mining: gravel extraction remediation; waste pile control	Clear Lake Management Plan; WMI Chapter
<b>R-15.3</b>	Implementation of stream restoration measures to restore and protect fish habitat and passage. Including the construction of fish barriers/screens, assessment of salmonid populations, monitoring of site-specific and cumulative biological response to	Clear Lake Basin; Coon Creek watershed; Auburn Ravine watershed; Dry Creek watershed; Merced River Watershed; Mill and Deer Creek Watersheds; Cosumnes River Watershed; Sacramento River Conservation Area; Battle Creek; Big Chico Creek; Cottonwood Creek; Cow	Agriculture 1A, 1C, 1D, 1E Hydromodification 5.1B, 5.3A Wetlands and Riparian Areas 6A, 6B, 6C	Upper Sacramento River Fisheries and Riparian Habitat Management Plan and Sacramento River Conservation Area Handbook (Sac River and tribs.); Cosumnes River Project Plan; Plan for California's

<b>Project Number</b>	<b>Project Description</b>	<b>Geographic Areas and/or Example Watersheds</b>	<b>Management Measure</b>	<b>Watershed Restoration Action Strategy</b>
	implementation of conservation/restoration strategies, and restoration of native riparian plant species.	Creek; Lower Butte Creek; and Mill Creek; Upper Cache Creek; Clear Lake Basin		Nonpoint Source Pollution Control Program;
<b>R-17.1</b>	Protect, restore and enhance sensitive watershed lands, through easement/fee title acquisitions and other means, to avoid, minimize and reduce water quality impacts from existing and encroaching land uses. Monitor to demonstrate effectiveness. Pollutants to be addressed would include nutrients, pesticides, heavy metals, other toxicants, sediment and bacteria.	Sacramento River mainstem and tributaries, especially within and upstream of the Sacramento River Conservation Area; Cosumnes River Watershed; North Fork Feather River; North Fork American; Fall River; Lower Clear Creek; Tuolumne River Watershed	Urban 3.1A, 3.6A Wetlands and Riparian Areas 6A, 6B	Upper Sacramento River Fisheries and Riparian Habitat Management Plan and Sacramento River Conservation Area Handbook (Sac River and tribs.); Plan for California's Nonpoint Source Pollution Control Program; Cosumnes River Project Plan
<b>R-18.1</b>	Implement projects for fuel reduction, wildlife habitat improvement, riparian and upslope restoration projects for erosion control, and non-native vegetation management. Include public education and involvement	Regionwide including Lake County; Upper Clear Creek; Shasta West; Lower Clear Creek; Sacramento River mainstem and tributaries, especially within and upstream of the Sacramento River Conservation Area; Cosumnes	Forestry 2G Urban 3.6A (Public Outreach) Hydromodification 5.1B, 5.3A Wetlands and Riparian Areas 6A, 6B	Upper Sacramento River Fisheries and Riparian Habitat Management Plan and Sacramento River Conservation Area Handbook (Sac River and tribs.); Plan for



<b>Project Number</b>	<b>Project Description</b>	<b>Geographic Areas and/or Example Watersheds</b>	<b>Management Measure</b>	<b>Watershed Restoration Action Strategy</b>
	when feasible.	River Watershed; North Fork Feather; North Fork American		California's Nonpoint Source Pollution Control Program; Cosumnes River Project Plan; CDF Vegetation Management Plan
<b>R-19.1</b>	Develop flow recommendations for anadromous fish passage in the valley sections	Regionwide including Mill and Deer Creek Watersheds		
<b>R-19.2</b>	Support :real-time'' flow metering and anadromous salmonid life history studies on the spring-run Chinook salmon streams	Regionwide		
<b>R-19.3</b>	Implement irrigation improvement projects to reduce water use.	Regionwide		
<b>R-19.4</b>	Implement public education programs about urban and agricultural recycling programs to reduce demand on freshwater inflows.	Regionwide		

<b>Project Number</b>	<b>Project Description</b>	<b>Geographic Areas and/or Example Watersheds</b>	<b>Management Measure</b>	<b>Watershed Restoration Action Strategy</b>
<b>R-19.5</b>	Provide educational programs on the California Irrigation Management Information System (CIMIS) database and how it can be utilized to reduce overall water use.	Regionwide		